

**Maryland Biological Stream Survey (MBSS)
Green Ridge State Forest**

The Green Ridge State Forest is located within four (4) of Maryland’s 8-digit watersheds. Those watersheds are Fifteen Mile Creek, Potomac River Alleghany County, Town Creek and Sideling Hill Creek. The entire Green Ridge State Forest is located within the Chesapeake Bay Drainage. The majority of Green Ridge State Forest is located within the Fifteen Mile Creek watershed (45.1%) with smaller amounts in Potomac River Alleghany County (28.0%) and Town Creek (23.6%) watersheds. A small amount of the State Forest is located in Sideling Hill Creek watershed (3.3%).

The total miles of streams by Strahler stream order in each watershed is presented in Table X.

Table X: Strahler Stream Order by Watershed

Watershed	Stream Order				
	1st	2nd	3rd	4th	5th
Fifteen Mile Creek	62.5	9.2	6.3	9.8	0
Potomac River Alleghany County	33.2	4.3	0	3.5	0
Town Creek	74.1	11.5	12.5	33.7	0
Sideling Hill Creek	14.8	7.9	0.4	16.0	0
Grand Total	184.6	32.9	19.2	63.0	0

Stream Condition

The Maryland Biological Stream Survey (MBSS) has randomly sampled streams across the state of Maryland to assess stream ecological condition. Stream condition is measured using information collected from the fish and the benthic macroinvertebrate communities. This information is analyzed and reported in one of four categories; good, fair, poor or very poor. The results for the six Green Ridge State Forest watersheds are presented in Table X for fish and Table X for benthic macroinvertebrates compared with statewide watershed condition.

TableX: Estimated Number of Stream Miles By Category; Fish Index of Biotic Integrity Compared to Statewide Condition

Watershed	Good	Fair	Poor	Very Poor	Not Rated
Fifteen Mile Creek	40.0	0	20.0	20.0	20.0
Potomac River Alleghany County/Sideling Hill Creek	30.0	0.0	0.0	30.0	40.0
Town Creek	35.0	0.0	15.0	30.0	20.0
STATEWIDE	26.0	25.0	21.0	19.0	9.0

Table X: Estimated Number of Stream Miles By Category; Benthic Index of Biotic Integrity Compared to Statewide Condition

Watershed	Good	Fair	Poor	Very Poor	Not Rated
Fifteen Mile Creek	50.0	50.0	0	0	0
Potomac River					
Allegheny					
County/Sideling Hill					
Creek	30.0	40.0	20.0	10.0	0
Town Creek	35.0	40.0	15.0	10.0	0
STATEWIDE	26.0	28.0	30.0	16.0	0

Aquatic Biodiversity

The Green Ridge State Forest is located within portions of seven of the 159 Stronghold Watersheds. Stronghold Watersheds are the 12-digit watersheds that are the most important to protect in order to preserve Maryland’s aquatic biodiversity. More information on Stronghold Watersheds can be found on the MBSS website (<http://www.dnr.state.md.us/streams/pdfs/StrongholdFactSheet.pdf>). The stronghold watersheds in the Green Ridge State Forest are important for the conservation of several state rare, threatened, or endangered species. These species include one fish (comely shiner), one crayfish (Allegheny crayfish), and six freshwater mussel species (creeper, Atlantic spike, brook floater, green floater, alewife floater and eastern lampmussel).

The MBSS has collected information on non-native aquatic species. Eleven non-native fishes have been found on or in close proximity to the Green Ridge State Forest. The eleven non-native species are common carp, brown trout, rainbow trout, largemouth bass, smallmouth bass, black crappie, rock bass, green sunfish, longear sunfish, bluegill and rainbow darter.

The MBSS has a long-term monitoring network called the Sentinel Site Network. This is a network of twenty-seven sites used to monitor the natural variability of streams and to investigate the possible effects to streams due to global climate change. These sites are the highest-quality sites identified by the MBSS with the least amount of anthropogenic influence in the upstream catchment. One of the twenty-seven Sentinel Sites is located in the Green Ridge State Forest.